

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/052056

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07C219/08 C07C213/08 C07C213/10 C08F20/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07C C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/55089 A (CHAPLINSKI VLADIMIR ;ATOFINA (FR); ESCH MARC (FR); RIONDEL ALAIN () 2 August 2001 (2001-08-02) page 3, line 25 - line 26; claims 1-10; examples 1,2	1,6-13
A	WO 01/55088 A (CHAPLINSKI VLADIMIR ;ATOFINA (FR); RIONDEL ALAIN (FR); TEMBOU N ZU) 2 August 2001 (2001-08-02) cited in the application page 5, line 20 - line 24; claims 1-13; examples 1,2	1,6-13
A	WO 01/55225 A (ATOFINA ;RIONDEL ALAIN (FR); VANHOYE DIDIER (FR); TEMBOU N ZUDIE D) 2 August 2001 (2001-08-02) cited in the application claims 1-6,9,10; examples 1-4	1,6-13
-/-		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

10 November 2004

Date of mailing of the international search report

17.02.2005

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 179 552 A (ATOFINA) 13 February 2002 (2002-02-13) claims 1-26; examples 1-4 & US 2002/035198 A1 21 March 2002 (2002-03-21) cited in the application -----	1,6-13
A	EP 1 253 137 A (ATOFINA) 30 October 2002 (2002-10-30) page 4, line 49 - line 57; claims 1-9; example 1 -----	1,6-13
A	EP 1 254 891 A (ATOFINA) 6 November 2002 (2002-11-06) page 2, line 15 - line 18; claims 1-10; example 1 -----	1,6-13
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11, 30 September 1998 (1998-09-30) & JP 10 158224 A (NITTO CHEM IND CO LTD;NITTO RIKEN KOGYO KK), 16 June 1998 (1998-06-16) abstract -----	1,6
A	FR 1 568 382 A (NAUCHNO-ISSLEDOVATELSKY INSTITUT) 23 May 1969 (1969-05-23) cited in the application page 2 - page 3; table 1 -----	1
A	FR 1 529 000 A (NII MONOMEROV DLYA SINT KAUCHU) 14 June 1968 (1968-06-14) cited in the application examples 1-4 -----	1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2004/052056

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1, 6-12 partly, 13 and 18-24 partly

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 6-12 partly, 13 and 18-24 partly

A Process for the preparation of (meth)acrylate di-ammonium salts of formula (I) using a specific organic solvent wherein the compound of formula (I) has a solubility at 25°C of less than 1g/100g of solvent and product thereof

2. claims: 2-5, 6-12 partly, 14-16 and 18-24 partly

Polymerisation process comprising units derived from at least one (meth)acrylate di-ammonium salt of formula (I), polymer and use thereof

3. claims: 17 and 18-21 partly

Process for the manufacture of a di-amino (meth)acrylate of formula (II) by transesterification using a lithium catalyst

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/052056

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0155089	A	02-08-2001	FR 2804110 A1 27-07-2001 AU 3556101 A 07-08-2001 CN 1365351 T 21-08-2002 EP 1192124 A2 03-04-2002 WO 0155089 A2 02-08-2001 US 2003050417 A1 13-03-2003
WO 0155088	A	02-08-2001	FR 2804111 A1 27-07-2001 AU 3555901 A 07-08-2001 CN 1365352 T 21-08-2002 EP 1192123 A2 03-04-2002 ES 2218390 T3 16-11-2004 WO 0155088 A2 02-08-2001 US 2003100679 A1 29-05-2003
WO 0155225	A	02-08-2001	FR 2804122 A1 27-07-2001 AU 3556201 A 07-08-2001 CN 1419572 T 21-05-2003 EP 1252207 A2 30-10-2002 WO 0155225 A2 02-08-2001 JP 2003523462 T 05-08-2003 US 2003153675 A1 14-08-2003
EP 1179552	A	13-02-2002	FR 2812644 A1 08-02-2002 AU 5781101 A 14-02-2002 BR 0103238 A 31-12-2002 CA 2354831 A1 07-02-2002 CN 1337414 A 27-02-2002 EP 1179552 A1 13-02-2002 JP 2002145956 A 22-05-2002 US 2002035198 A1 21-03-2002
US 2002035198	A1	21-03-2002	FR 2812644 A1 08-02-2002 AU 5781101 A 14-02-2002 BR 0103238 A 31-12-2002 CA 2354831 A1 07-02-2002 CN 1337414 A 27-02-2002 EP 1179552 A1 13-02-2002 JP 2002145956 A 22-05-2002
EP 1253137	A	30-10-2002	FR 2824063 A1 31-10-2002 CN 1390828 A 15-01-2003 EP 1253137 A1 30-10-2002 JP 2002371041 A 26-12-2002 US 2002193545 A1 19-12-2002
EP 1254891	A	06-11-2002	FR 2824061 A1 31-10-2002 CN 1382684 A 04-12-2002 EP 1254891 A1 06-11-2002 JP 2002363145 A 18-12-2002 US 2002183543 A1 05-12-2002
JP 10158224	A	16-06-1998	NONE
FR 1568382	A	23-05-1969	NONE
FR 1529000	A	14-06-1968	NONE